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Biondo

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[45] **Date of Patent: Oct. 8, 1996**

[54] **HARDWARE FOR BURIAL CASKET**

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[73] Assignee: **Batesville Casket Company, Inc.**, Batesville, Ind.

[21] Appl. No.: **455,326**

[22] Filed: **May 26, 1995**

[51] **Int. Cl.**[6] **A61G 17/00**

[52] **U.S. Cl.** ..... **27/27**; 27/1; 16/111 R; 16/115

[58] **Field of Search** ..... 16/111 R, 114 R, 16/115; 27/1, 2–6, 10, 27, 35

[56] **References Cited**

U.S. PATENT DOCUMENTS

3,204,286	9/1965	Hillenbrand .	
3,657,764	4/1972	Relly et al. .	
4,237,590	12/1980	Work	27/35
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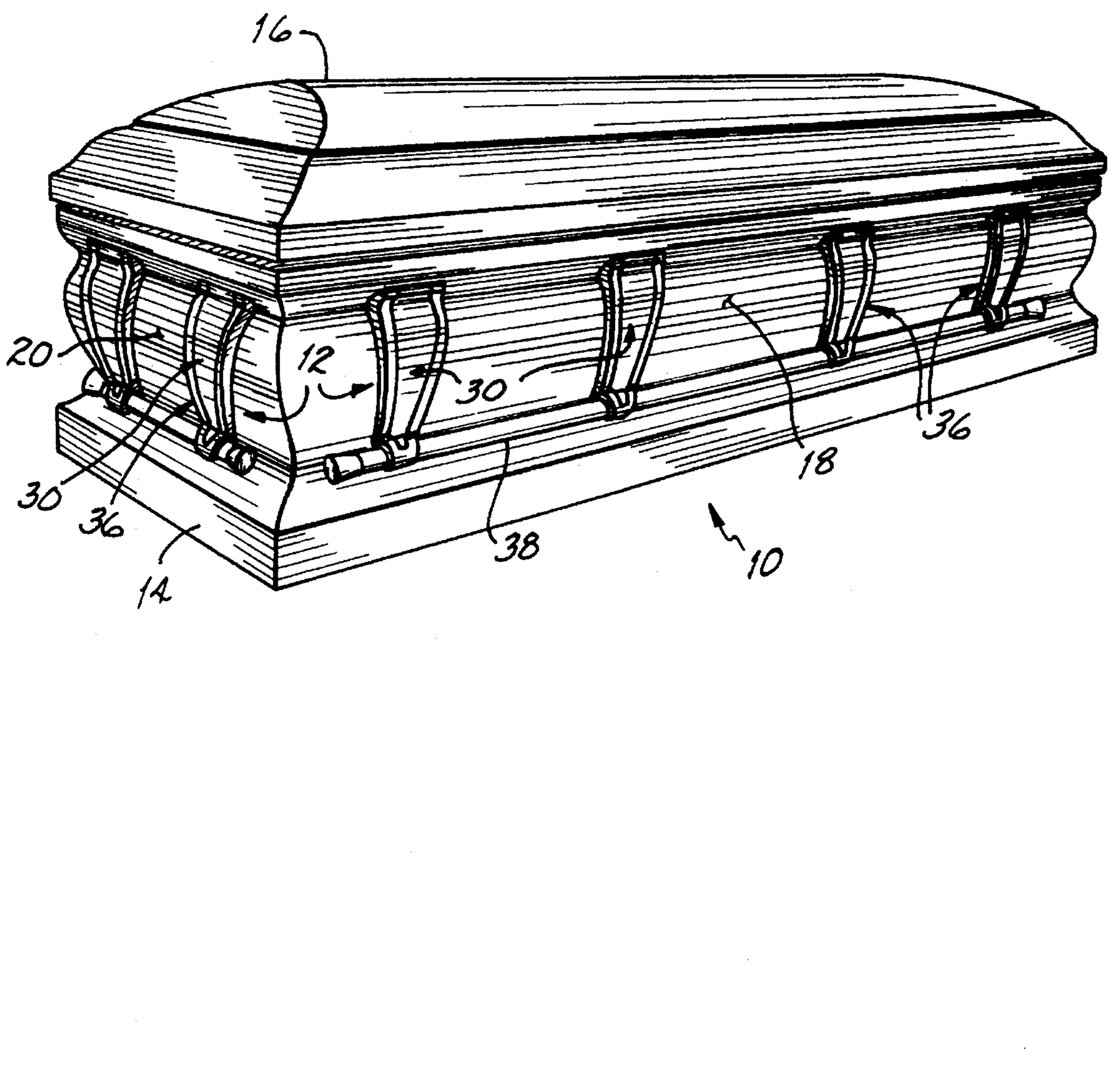
Primary Examiner—Carl D. Friedman
Assistant Examiner—Beth A. Aubrey
Attorney, Agent, or Firm—Wood, Herron & Evans

[57] **ABSTRACT**

A combination burial casket and hardware comprises a casket shell having a wall, a plate secured to the wall and having a rear edge and a forward surface, an arm, adapted to receive and support a handle bar, pivoted to the plate, and including at least one transverse pivot member, with the plate including at least one rearward facing notch formed in the plate rear edge and receiving the at least one transverse pivot member, the plate forward surface concealing the transverse pivot member, and a stop operable between the plate and the arm limiting pivotal movement of the arm relative to the plate. The arm comprises a pair of elongated arm members or is an integral one piece arm member. The transverse pivot member comprises a pivot bar or a pair of pivot pins. The stop comprises a first projection on the plate and second and third projections on the pivot member. Either the plate or the arm include ornamentation. The arm and pivot member are cast as a single part. The plate is cast and includes a cast in place threaded stud concealed by the plate forward surface.

31 Claims, 4 Drawing Sheets



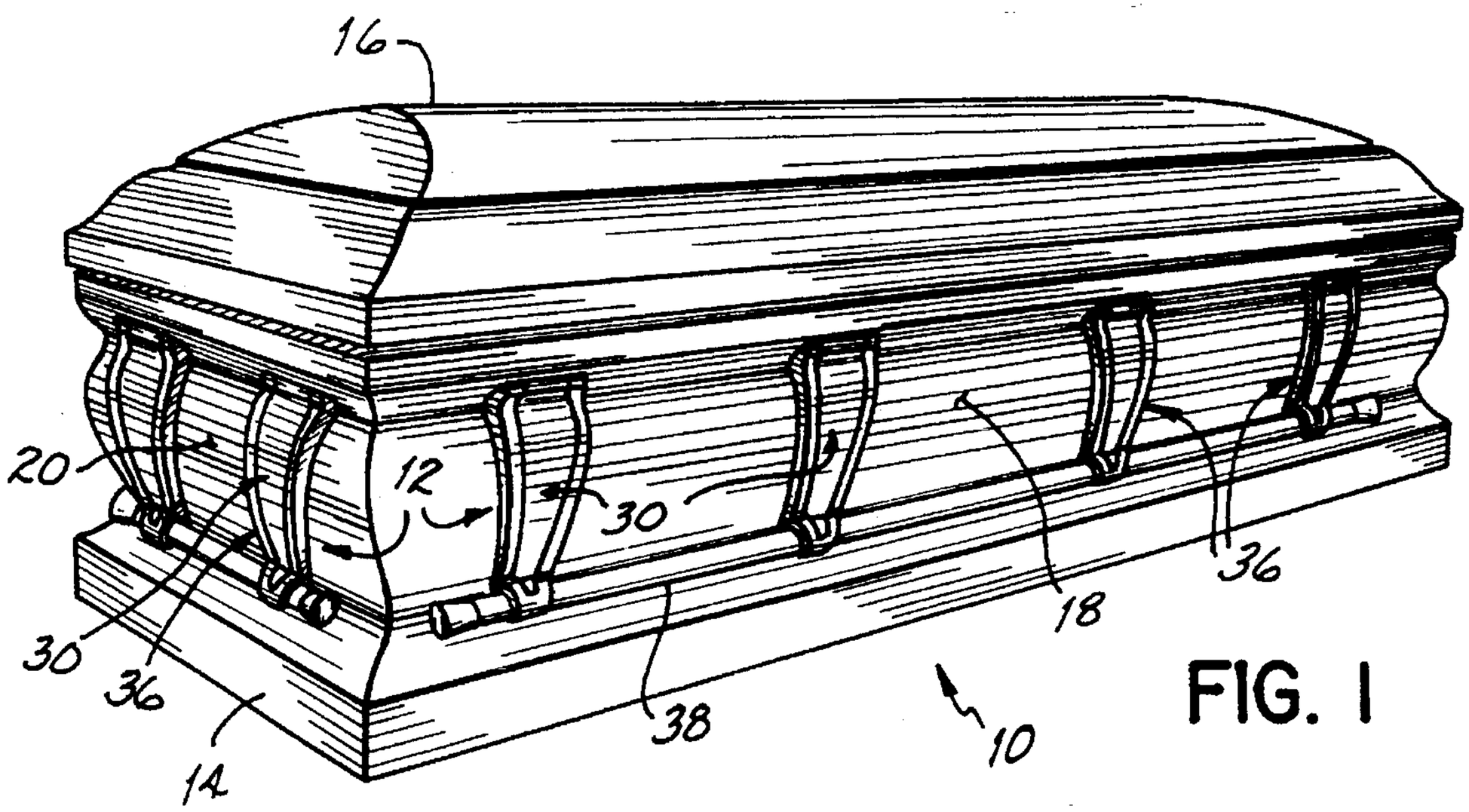


FIG. 1

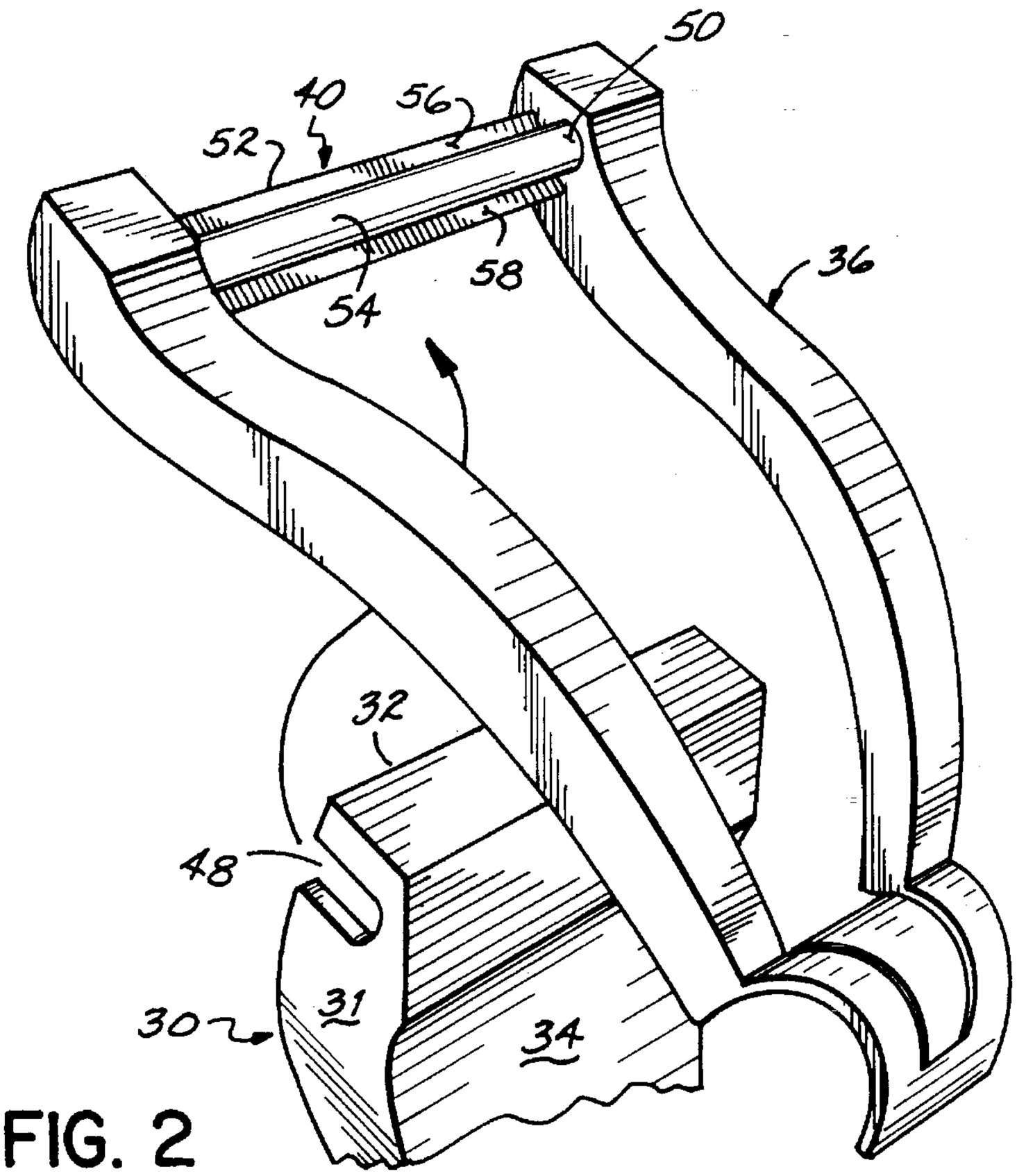


FIG. 2

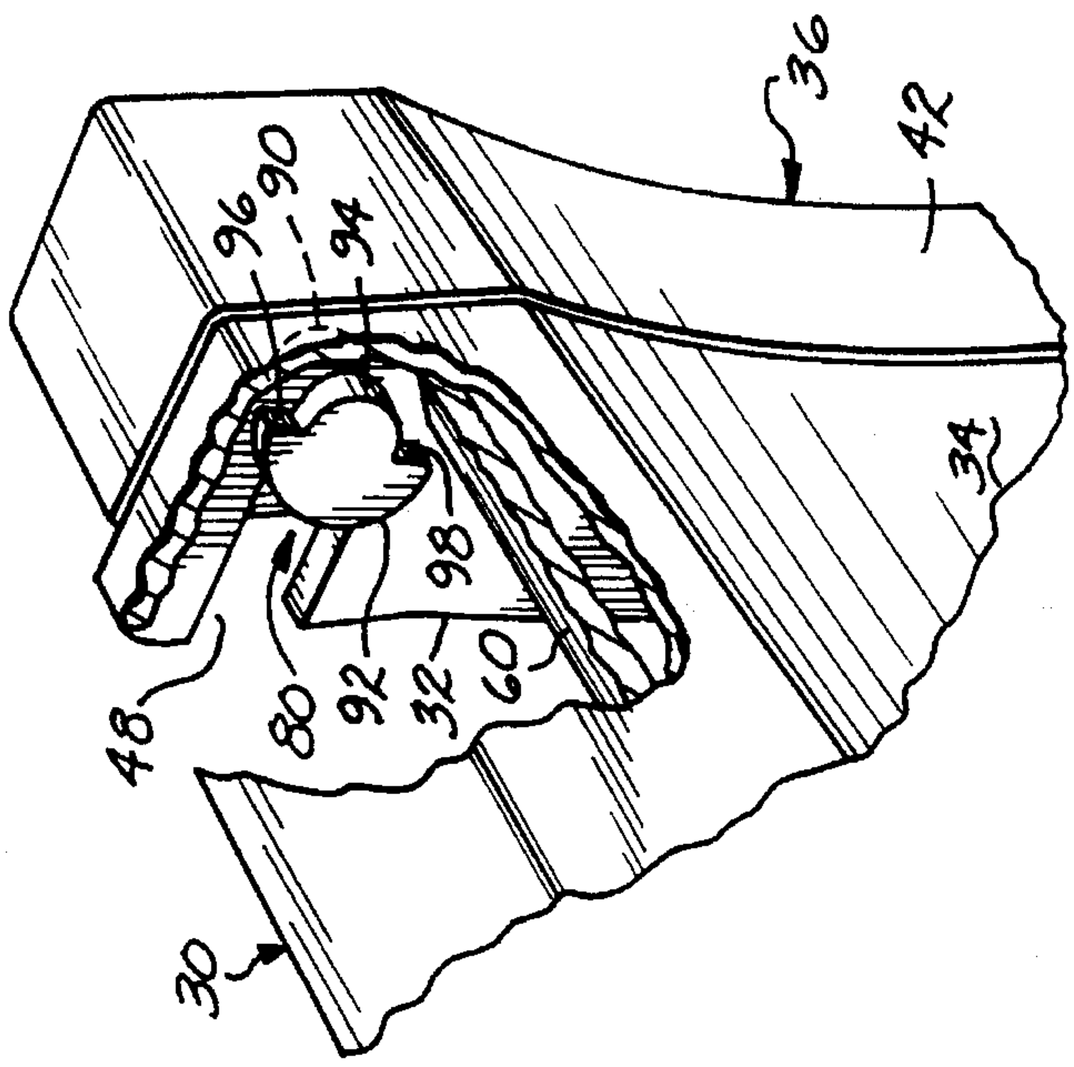


FIG. 5

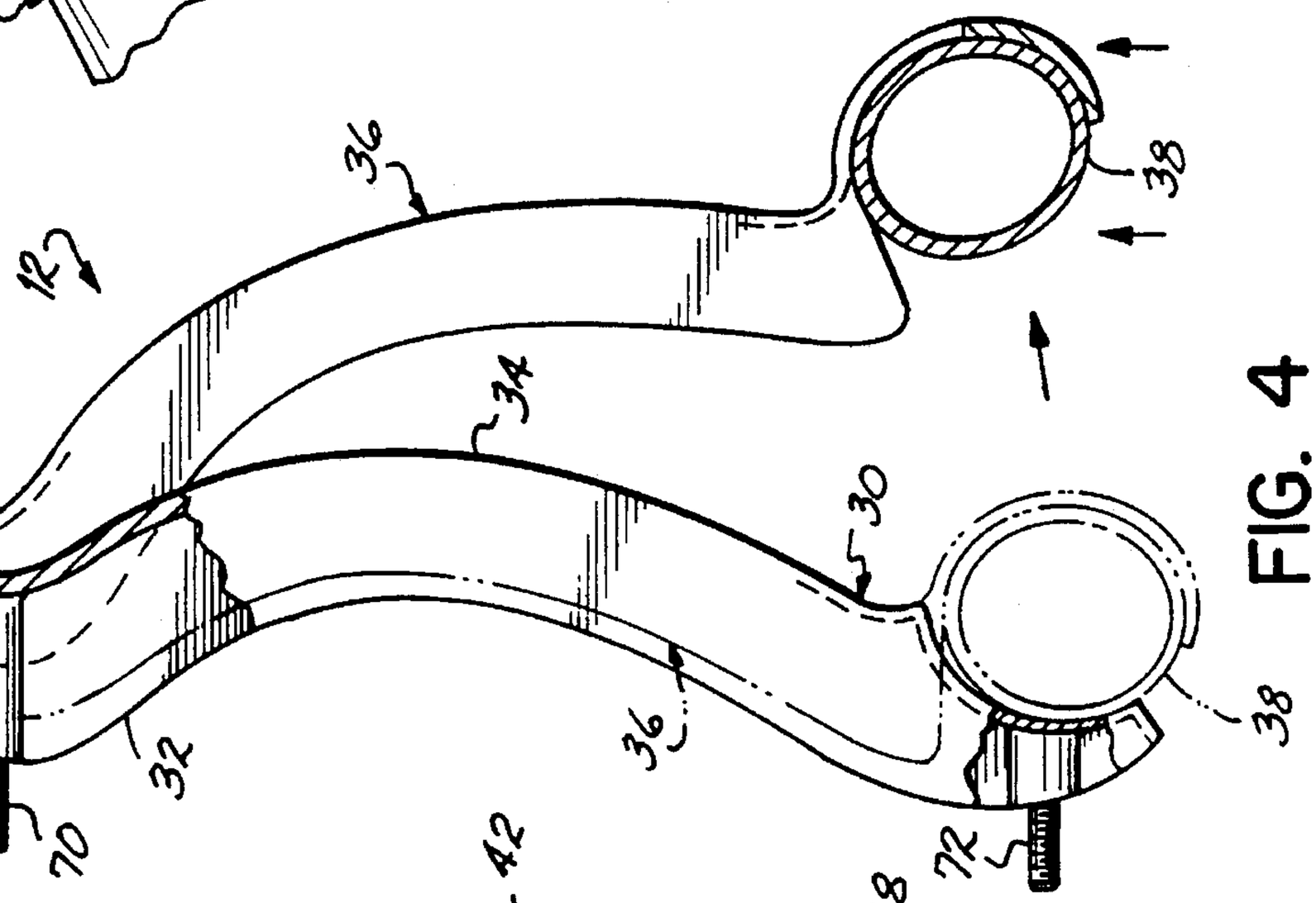


FIG. 4

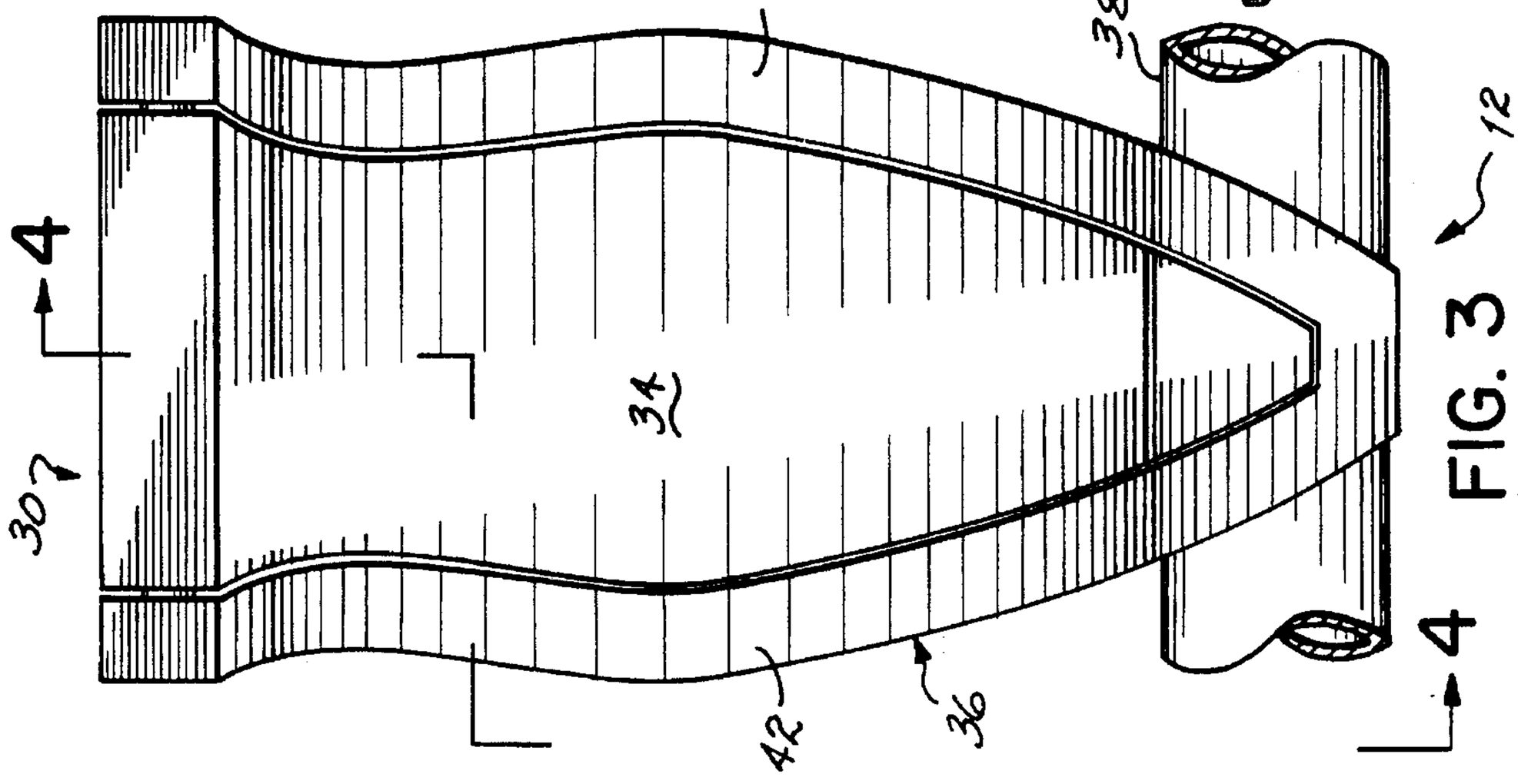


FIG. 3

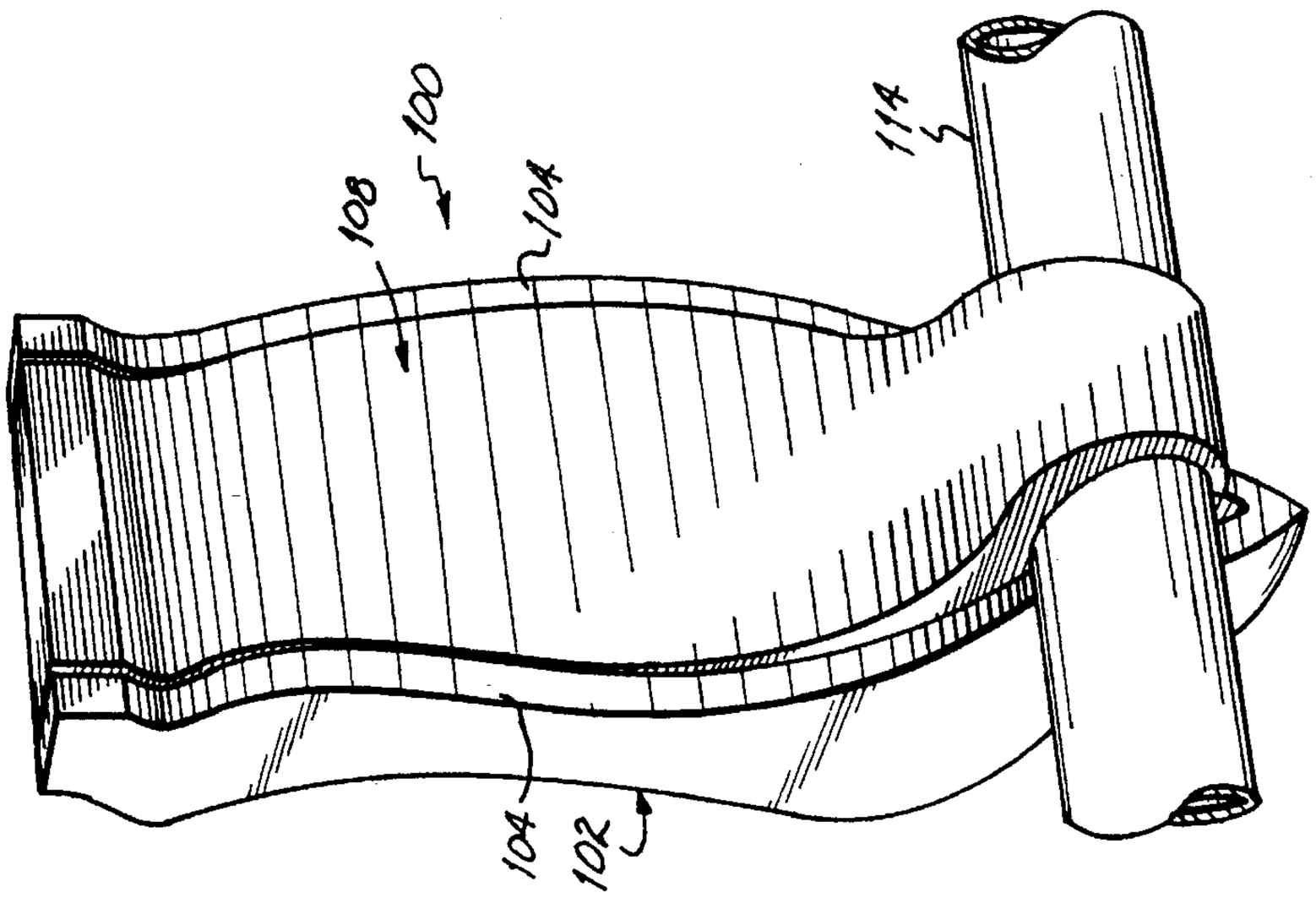


FIG. 7

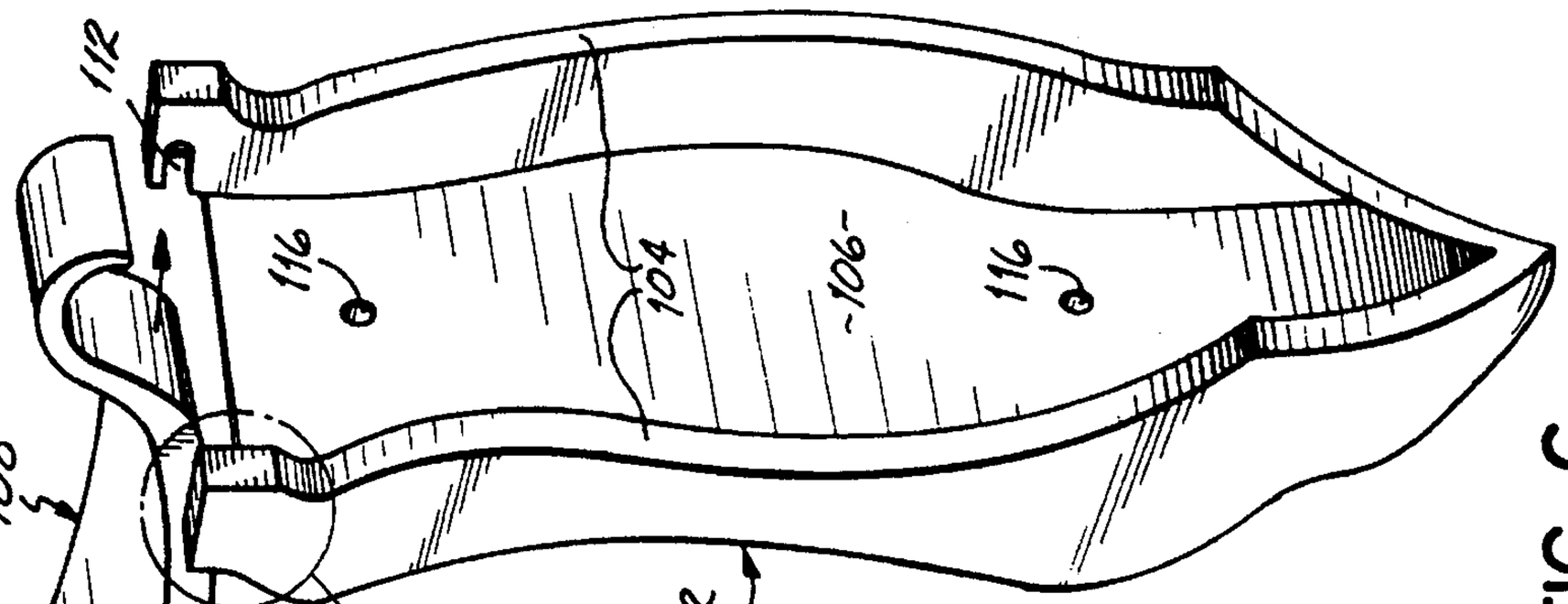


FIG. 6

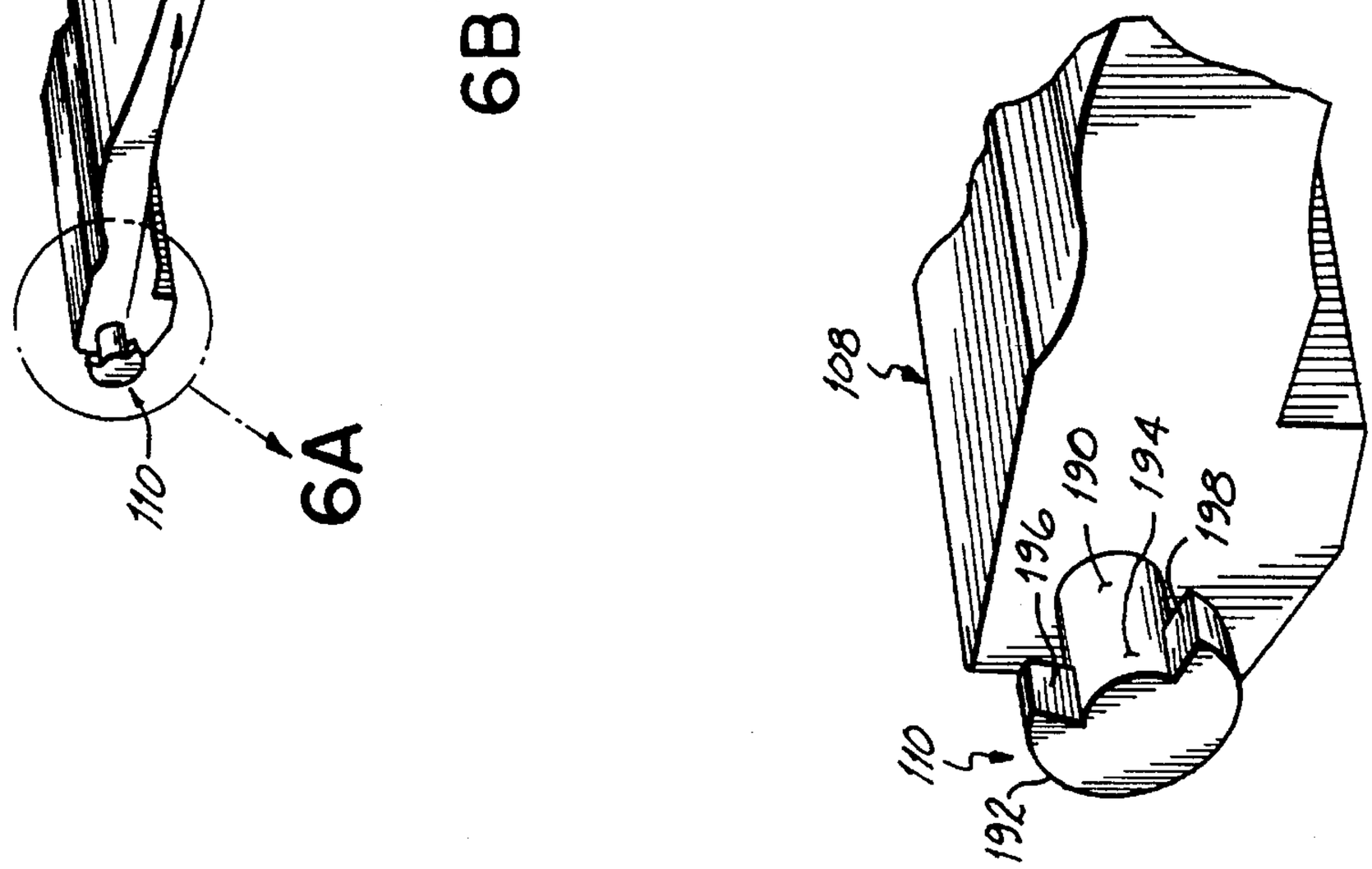


FIG. 6A

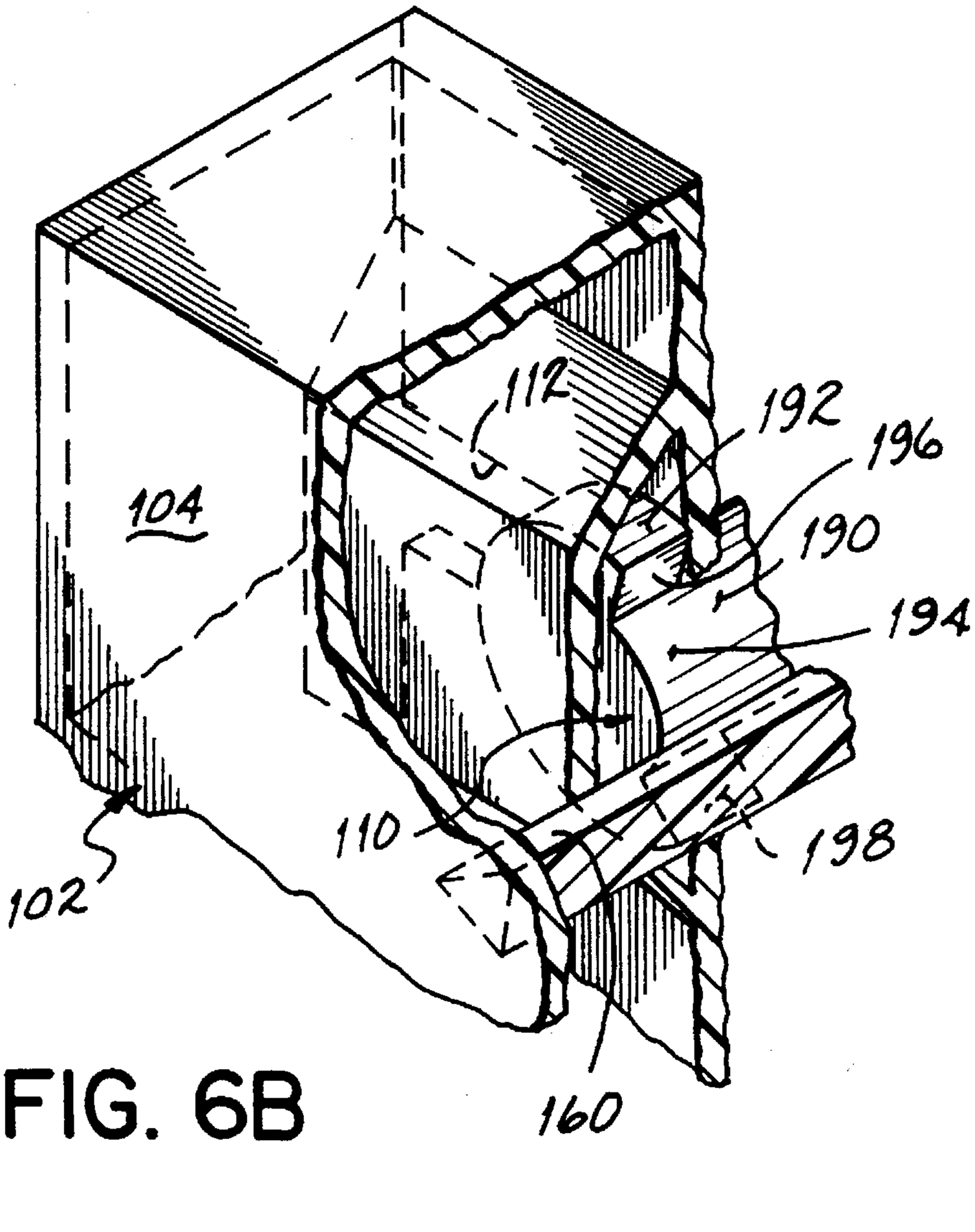


FIG. 6B

HARDWARE FOR BURIAL CASKET

FIELD OF THE INVENTION

This invention relates generally to burial caskets, and more particularly to hardware for attachment to and handling of a casket.

BACKGROUND OF THE INVENTION

Burial caskets are traditionally provided with hardware mounted peripherally around the shell of the casket for lifting and handling the casket. One form of casket hardware includes an arm with an elongated lifting handle bar attached to one end of the arm, with the other end of the arm being pivoted to a clevis with a rivet. The clevis has a bolt attached to it which passes through a hole in a decorative plate, known as an "ear" or "escutcheon" and through a hole in the casket shell wall. A nut secures the bolt and hence arm and escutcheon plate to the shell wall. The escutcheon plate includes a recess or socket for receiving the clevis and the arm generally includes an upper end which extends over the clevis. Thus once installed the casket hardware presents a decorative escutcheon plate from which depends a decorative arm which in turn supports the handle bar; the combination of arm and escutcheon recess hide from view the utilitarian mechanics of attaching the arm and escutcheon to the casket shell. Such casket hardware is disclosed in, for example, U.S. Pat. Nos. 3,204,286 and 4,615,085, both assigned to the assignee of the present invention.

At least two shortcomings of this type of casket hardware reside in the number and size of the piece parts required to construct the hardware assembly. The hardware assembly requires several separate piece parts which are each individually manufactured resulting in greater manufacturing costs. A number of the parts are rather small in size thus making the assembly of the hardware a tedious job. It is therefore desirable to provide casket hardware which reduces the number of individual piece parts and in particular the number of small piece parts in order that the hardware can be more economically manufactured and assembled. Any such casket hardware must however continue to hide or conceal from normal view the utilitarian mechanical aspects of the attachment of the escutcheon and arm to the casket shell.

Another form of casket hardware includes a mounting plate secured to the casket shell wall. The plate includes a pair of lateral ears. The ears includes apertures for accepting pins or trunnions on the ends of elongated handle bars. A handle bar spans between the facing ears of adjacent mounting plates and the handle bar pins fit in those ears. A separate decorative plate or cover is secured over each mounting plate to conceal the attachment of the handle bar to the ear and of the mounting plate to the casket shell wall. Such casket hardware is disclosed in U.S. Pat. No. 3,657,764 also assigned to the assignee of the present invention.

The shortcoming of this form of hardware resides in the requirement that a separate, decorative plate or cover be installed over the mounting plate in order to conceal the various attachments mentioned above.

It is therefore an objective of the present invention to provide casket hardware which reduces the total number of piece parts, which reduces the number of small piece parts, and which conceals the structural attachment of the hardware to the casket.

SUMMARY OF THE INVENTION

The present invention attains the stated objectives by providing a combination burial casket and hardware. The combination comprises a casket shell having a wall forming a part thereof, a plate secured to the casket shell wall and having a rear casket wall facing edge and a forward surface opposite the rear edge, an arm, adapted to receive and support a handle bar, pivoted to the plate, and including at least one transverse pivot member, the plate including at least one reward facing notch formed in the plate rear edge and receiving the at least one transverse pivot member with the plate forward surface concealing the transverse pivot member, and a stop operable between the plate and the arm limiting pivotal movement of the arm relative to the plate.

In one embodiment, the arm comprises a pair of elongated arm members, with one arm member of the pair of arm members being disposed outboard of each lateral edge of the plate. In this embodiment the at least one transverse pivot member comprises either a pivot bar connecting the pair of elongated arm members at their upper ends or a pair of pivot pins with one pivot pin of the pair of pins being located on each elongated arm member of the pair of arm members at an upper end, and the at least one notch comprises a pair of notches with one notch of the pair being located near each lateral edge of the plate.

In another embodiment, the arm is an integral one piece member having a pair of lateral edges with one lateral edge of the pair being disposed inboard of each lateral edge of the plate. In this embodiment the at least one transverse pivot member comprises a pair of pivot pins, with one pivot pin of the pair of pins being located on each lateral side of the arm at an upper end thereof.

The stop of the hardware comprises a first projection on one of either the plate or the transverse pivot member and second and third projections on the other of either the plate or the transverse pivot member. The second and third projections cooperate with the first projection to permit relative angular movement of the plate and transverse pivot member by only a predetermined angular amount.

The first projection is preferably on the plate and the second and third projections are preferably on the transverse pivot member.

In the embodiment where the arm comprises a pair of elongated arm members the plate preferably includes decoration or ornamentation on its forward surface. In the embodiment where the arm is an integral one piece member the arm preferably includes decoration or ornamentation on its forward surface.

The arm of the hardware of the present invention is preferably in the range of about 6 inches to about 9 inches in length.

The arm and pivot member are preferably cast as a single, integral piece part and the plate is also preferably cast and includes a threaded stud which is cast in place and is concealed by the forward plate surface.

The advantage of the present invention is that casket hardware is provided which reduces the total number of piece parts of the hardware, which reduces the number of small hardware piece parts, and which conceals the structural attachment of the hardware to the casket.

These and other objects and advantages of the present invention will become more readily apparent during the following detailed description taken in conjunction with the drawings herein, in which:

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a perspective view of a casket including the hardware of the present invention;

FIG. **2** is a fragmentary perspective view of the hardware of FIG. **1** being assembled;

FIG. **3** is a front elevational view of the hardware of FIGS. **1** and **2**;

FIG. **4** is a view taken along line **4**—**4** of FIG. **3**;

FIG. **5** is a fragmentary perspective view, partially broken away, of the hardware of FIGS. **2**–**4** but illustrating an alternative form of pivot member;

FIG. **6** is a perspective view of an alternative embodiment of the hardware of the present invention being assembled;

FIG. **6**A is an enlarged view of the encircled area **6**A of FIG. **6**;

FIG. **6**B is an enlarged view of the encircled area **6**B of FIG. **6** after assembly; and

FIG. **7** is a perspective view of the assembled hardware of FIG. **6**.

DETAILED DESCRIPTION OF THE INVENTION

Referring first to FIG. **1**, there is illustrated a casket **10** including hardware **12** of the present invention. Casket **10** includes a lower shell **14** to which is hinged a cap or lid **16**. Shell **14** includes a pair of side walls, one of which is shown at **18**, and a pair of end walls, one of which is shown at **20**. While the illustrated casket is of metal construction, it will be appreciated that the hardware of the present invention could as well be employed on wood caskets.

Referring now to FIGS. **2**, **3** and **4**, the hardware **12** is shown in more detail. The hardware **12** includes a plate **30** which may be secured to casket shell walls **18** and **20**. Plate **30** includes a rear casket wall facing edge **32** and a forward surface **34** opposite the rear edge **32**. An arm **36** is adapted by conventional means to receive and support, at its lower end, a handle bar **38**. The arm **36** is pivoted to the plate **30** by a transverse pivot member **40** which, in the embodiment illustrated in FIG. **2**, comprises a pivot bar connected between the upper ends of a pair of elongated arm members **42**. The lateral edges **31** of the plate **30** each include a reward facing slot **48** therein projecting forward from rear edge **32** which receives the pivot bar **40** therein. Assembling the arm **36** and the plate **30** as shown in FIG. **2** positions one elongated arm member **42** of the pair of elongated arm members outboard of each lateral edge **31** of the plate **30**. The plate forward surface **34**, which preferably includes decoration or ornamentation applied thereto, conceals the transverse pivot member **40** and its connection to the plate **30**.

As best seen in FIGS. **2** and **4**, the pivot bar **40** includes cylindrical outboardmost portions **50** which ride in the slots **48** in plate **30**. Intermediate the cylindrical portions **50** is a larger diameter cylindrical portion **52** which has machined therefrom or otherwise formed therein a sector **54** resulting in stop projections **56** and **58**. A cooperating stop projection **60** formed as a part of the plate **30** projects rearwardly into and between the projections **56** and **58** when arm **36** and plate **30** are assembled. Stop projections **56**, **58** and **60** limit the angular travel of the arm **36** relative to the plate **30** when lifting the casket **10** by the handle **38**.

As seen in FIG. **4**, plate **30** includes a pair of threaded studs **70** and **72** which secure the plate **30** to the casket shell walls via threaded nuts (not shown). Studs **70** and **72** are preferably cast in place when casting the plate **30** from, for example, zinc. The forward surface **34** thus conceals the studs **70** and **72** from view when installed. Arm **36** and transverse pivot member **40** are likewise preferably cast, and as a single, integral piece from, for example, zinc. The design of the casket hardware readily lends itself to rather elongated, vertical hardware as illustrated in the Figs. wherein the arm **36** is on the order of about 6 inches to about 9 inches in length. When utilizing such elongated casket hardware, care must be taken to limit the angular travel of the arm **36** relative to the plate **30** via stop projections **56**, **58** and **60** to ensure that only acceptable levels of torque are applied from the handle **36** to the plate **30** and ultimately to the casket shell walls to avoid oil canning the walls when lifting the casket and its contents by the handle **38**. Handle **38**, normally disposed closely adjacent to the casket shell wall, is preferably permitted to travel a horizontal distance of only about 1.5 inches from the shell wall to permit grasping of handle **38**. Horizontal travel of handle **38** in excess of 1.5 inches is generally not desirable in order to limit the torque generated by lifting the casket **10** and applied through the hardware **12** to the casket wall. Depending upon the shell wall curvature and the length of the handle **38** the required amount of horizontal travel of handle **38** requires an angular travel of arm **36** relative to plate **30** of about 15 degrees to about 20 degrees.

Referring now to FIG. **5**, and with like numbers representing like elements, there is illustrated another form of transverse pivot member which takes the form of a pair of pivot pins, one of which is shown at **80**. Each of the pins **80**, similar to the pivot bar, includes a cylindrical outboardmost portion **90** which rides in the slot **48** in plate **30**. Inboard the cylindrical portion **90** is a larger diameter cylindrical portion **92** which has machined therefrom or otherwise formed therein a sector **94** resulting in stop projections **96** and **98**. As in the prior form of transverse pivot member, the cooperating stop projection **60** formed as a part of the plate **30** projects rearwardly into and between the projections **96** and **98** when arm **36** and plate **30** are assembled. Stop projections **96**, **98** and **60** limit the angular travel of the arm **36** relative to the plate **30** when lifting the casket **10** by the handle **38**.

Referring now to FIGS. **6**, **6**A, **6**B and **7**, there is illustrated another form of hardware indicated at **100**. In this embodiment, the hardware **100** includes a plate **102** having lateral edges **104** and defining a pocket or cavity **106** therebetween which accepts an integral one-piece arm member **108**. In this embodiment, arm **108** includes a pair of pins **110** which are similar in construction to the pins **90** as shown in FIG. **5**. Plate **102** includes a pair of rearwardly facing slots **112** which accept the pins **110** in much the same manner as the prior embodiments. The lower end of arm **108** is adapted by conventional means to receive and support a handle bar **114**. As in the prior embodiment, the plate **102** may include threaded studs cast in place concealed by the forward plate surface. Alternatively, conventional fasteners (not shown) can be utilized to mount plate **102** via mounting holes **116**, as arm **108** normally conceals the heads of the fasteners from view. Arm **108** preferably includes decoration or ornamentation on its forward surface.

As seen in FIGS. **6**A and **6**B, each of the pins **110** includes a cylindrical portion **190** which rides in the slot **112** in the plate **102**. A larger diameter cylindrical portion **192** has machined therefrom or otherwise formed therein a sector **194** resulting in stop projections **196** and **198**. A cooperating stop projection **160** is formed as a part of the lateral edge **104** of arm **102**. The stop projection **160** projects rearwardly into

and between the projections **196** and **198** when arm **108** and plate **102** are assembled. Stop projections **196**, **198** and **160** limit the angular travel of the arm **108** relative to the plate **102** when lifting the casket **10** by the handle **114**.

Those skilled in the art will readily recognize numerous adaptations and modifications which can be made to the present invention which will result in an improved casket hardware, yet all of which will fall within the spirit and scope of the present invention as defined in the following claims. Accordingly, the invention is to be limited only by the scope of the following claims and their equivalents.

What is claimed is:

1. A combination of a burial casket and hardware for lifting said casket, said combination comprising:

a casket shell having a wall forming a part thereof;

a plate secured to said casket shell wall, said plate having a rear casket wall facing edge and a forward surface opposite said rear edge;

an arm, adapted to receive and support a handle bar, pivoted to said plate, said arm including at least one transverse pivot member;

said plate including at least one rearward facing notch formed in said plate rear edge, said at least one notch receiving said at least one transverse pivot member, said plate forward surface concealing said transverse pivot member; and

a stop operable between said plate and said arm limiting pivotal movement of said arm relative to said plate.

2. The combination of claim **1** wherein:

said arm comprises a pair of elongated arm members;

one arm member of said pair of elongated arm members being disposed outboard of each lateral edge of said plate.

3. The combination of claim **2** wherein:

said at least one transverse pivot member comprises a pivot bar connecting said pair of elongated arm members at upper ends thereof; and

said at least one notch comprises a pair of notches, one notch of said pair of notches being located near each lateral edge of said plate.

4. The combination of claim **2** wherein:

said at least one transverse pivot member comprises a pair of pivot pins, one pivot pin of said pair of pins being located on each elongated arm member of said pair of arm members at an upper end thereof; and

said at least one notch comprises a pair of notches, one notch of said pair of notches being located near each lateral edge of said plate.

5. The combination of claim **1** wherein:

said arm is an integral one piece member having a pair of lateral edges;

one lateral edge of said pair of arm lateral edges being disposed inboard of each lateral edge of said plate.

6. The combination of claim **5** wherein:

said at least one transverse pivot member comprises a pair of pivot pins, one pivot pin of said pair of pins being located on each lateral side of said arm at an upper end thereof; and

said at least one notch comprises a pair of notches, one notch of said pair of notches being located near each lateral edge of said plate.

7. The combination of claim **1** wherein said stop comprises:

a first projection on one of said plate and transverse pivot member; and

second and third projections on the other of said plate and transverse pivot member;

said second and third projections cooperating with said first projection to permit relative angular movement of said plate and transverse pivot member by only a predetermined angular amount.

8. The combination of claim **7** wherein said first projection is on said plate and said second and third projections are on said transverse pivot member.

9. The combination of claim **2** wherein said plate includes decoration or ornamentation on said forward surface.

10. The combination of claim **5** wherein said arm includes decoration or ornamentation on a forward surface of said arm.

11. The combination of claim **1** wherein said arm is in the range of about 6 inches to about 9 inches in length.

12. The combination of claim **1** wherein said arm and at least one pivot member are cast as a single, integral piece part.

13. The combination of claim **12** wherein said plate includes a threaded stud, said plate is cast and said stud is cast in place and concealed by said plate forward surface.

14. A combination of a burial casket and hardware for lifting said casket, said combination comprising:

a casket shell having a wall forming a part thereof;

a plate secured to said casket shell wall, said plate having a rear casket wall facing edge and a forward surface opposite said rear edge;

an arm, adapted to receive and support a handle bar, said arm including a pivot bar spanning the width of said arm;

said plate including a pair of rearward facing notches formed in said plate rear edge, said pair of notches receiving said pivot bar, said plate forward surface concealing said pivot bar; and

a stop operable between said plate and said arm limiting pivotal movement of said arm relative to said plate.

15. The combination of claim **14** wherein said arm comprises a pair of elongated arm members, said pivot bar connecting said pair of elongated arm members at upper ends thereof.

16. The combination of claim **14** wherein said stop comprises:

a first projection on one of said plate and pivot bar; and

second and third projections on the other of said plate and pivot bar;

said second and third projections cooperating with said first projection to permit relative angular movement of said plate and transverse pivot member by only a predetermined angular amount.

17. The combination of claim **16** wherein said first projection is on said plate and said second and third projections are on said pivot bar.

18. The combination of claim **15** wherein said plate includes decoration or ornamentation on said forward surface.

19. The combination of claim **14** wherein said arm is in the range of about 6 inches to about 9 inches in length.

20. The combination of claim **14** wherein said arm and pivot bar are cast as a single, integral piece part.

21. The combination of claim **20** wherein said plate includes a threaded stud, said plate is cast and said stud is cast in place and concealed by said plate forward surface.

22. A combination of a burial casket and hardware for lifting said casket, said combination comprising:

a casket shell having a wall forming a part thereof;

a plate secured to said casket shell wall, said plate having a rear casket wall facing edge and a forward surface opposite said rear edge;

an arm, adapted to receive and support a handle bar, said arm including a pair of pivot pins, one pivot pin of said pair of pins being located on each lateral side of said arm;

said plate including a pair of rearward facing notches formed in said plate rear edge, said pair of notches receiving said pivot pins, said plate forward surface concealing said pivot pins; and

a stop operable between said plate and said arm limiting pivotal movement of said arm relative to said plate.

23. The combination of claim **22** wherein said arm comprises a pair of elongated arm members, one pivot pin of said pair of pins being located on each elongated arm member of said pair of arm members at an upper end thereof.

24. The combination of claim **22** wherein said arm is an integral one piece member, one pivot pin of said pair of pins being located on each lateral side of said arm at an upper end thereof.

25. The combination of claim **22** wherein said stop comprises:

a first projection on one of said plate and pivot pins; and

second and third projections on the other of said plate and pivot pins;

said second and third projections cooperating with said first projection to permit relative angular movement of said plate and transverse pivot pins by only a predetermined angular amount.

26. The combination of claim **25** wherein said first projection is on said plate and said second and third projections are on said pivot pins.

27. The combination of claim **23** wherein said plate includes decoration or ornamentation on said forward surface.

28. The combination of claim **24** wherein said arm includes decoration or ornamentation on a forward surface of said arm.

29. The combination of claim **22** wherein said arm is in the range of about 6 inches to about 9 inches in length.

30. The combination of claim **22** wherein said arm and at least pair of pivot pins are cast as a single, integral piece part.

31. The combination of claim **30** wherein said plate includes a threaded stud, said plate is cast and said stud is cast in place and concealed by said plate forward surface.

* * * * *

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 5,561,892
DATED : October 8, 1996
INVENTOR(S) : John A. Biondo

It is certified that error appears in the above-indentified patent and that said Letters Patent is hereby corrected as shown below:

Column 2, line 11, "reward" should read -- rearward --.

Column 3, line 44, "reward" should read -- rearward --.

Column 8, line 20 "at least pair" should read -- said pair --.

Signed and Sealed this

Nineteenth Day of August, 1997

Attest:

BRUCE LEHMAN

Attesting Officer

Commissioner of Patents and Trademarks